

ABSTRACT

A first magnetic film includes a first pole piece, and a second magnetic film includes a second magnetic piece. A gap film is disposed between the first pole piece and the second pole piece. The first magnetic film and the second magnetic film are magnetically joined with each other at a joint as viewed backward from the first pole chip and the second pole chip. A coil film winds vertically around the joint. Third magnetic films are disposed at both sides of the first pole piece or the second pole piece by a given distance.